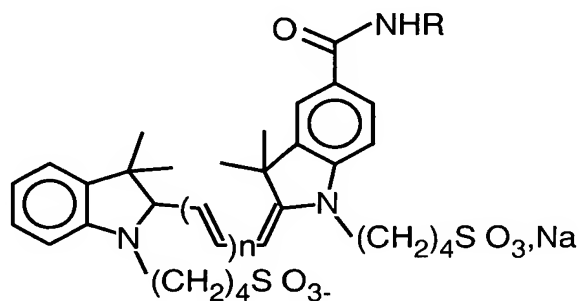


FIG. 2

Targeting/NIR-Imaging Dyads



R₁ = -Ala - Gly - Cys - Lys - Asn - Phe - Phe - Trp - Lys - Thr - Phe - Thr - Ser - Cys - COO -

Somatostatin-14

R₂ = -dPhe - Cys - Phe - dTrp - Lys - Thr - Cys - Thr - COO -

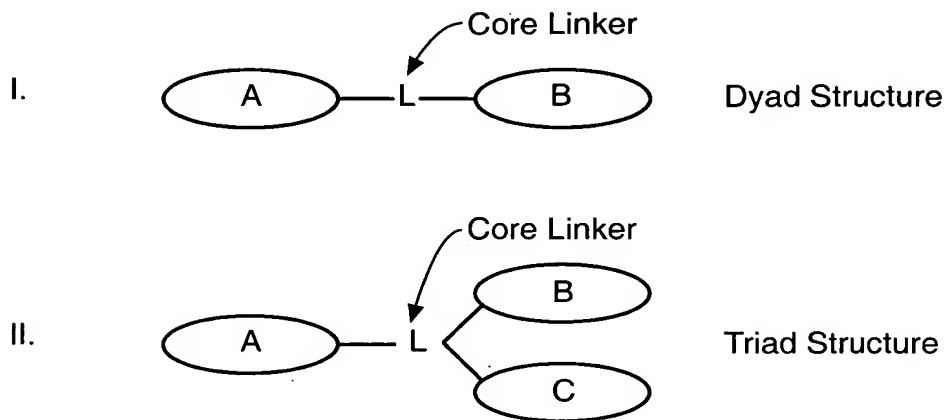
Octreotate

R₃ = -dPhe - Met - Phe - dTrp - Lys - Thr - Met - Thr - COO -

(M²M⁷)Octreotate

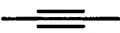

IDC; n = 2 ITTC; n = 3

**Dyad and Triad Structures Incorporating Targeting,
Imaging and 2-Photon PDT Components**



For I, A = Somatostatin Analog or Other Molecular Targeting Agent
B = 2-Photon Fluorescence Imaging (Low Laser Power) or 2-Photon PDT Chromophore (High Laser Power)

For II, A = Somatostatin Analog or Other Molecular Targeting Agent
B = 1-Photon Imaging Chromophore
C = 2-Photon PDT Chromophore

For I, L =  or  or Alkyl, Aryl

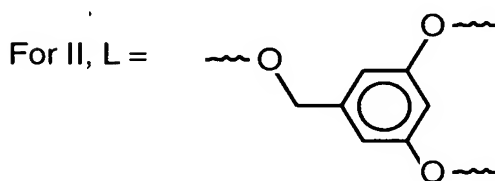


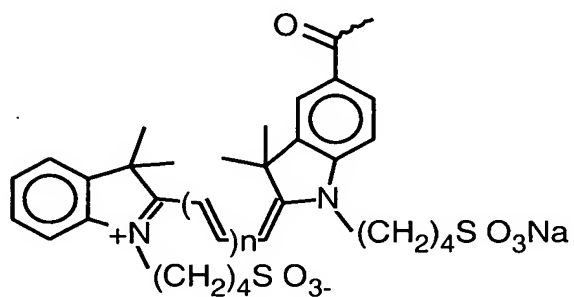
FIG. 3

Typical Triad Components

Typical Triad Components:

A = -dPhe - Cys - Phe - dTrp - Lys - Thr - Cys - Thr - COO -

B =



C =

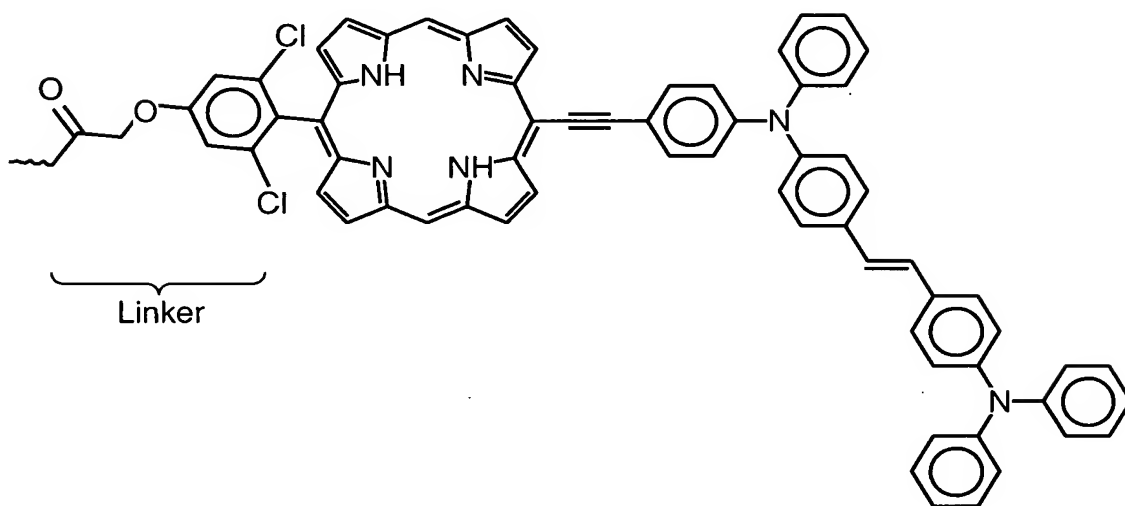
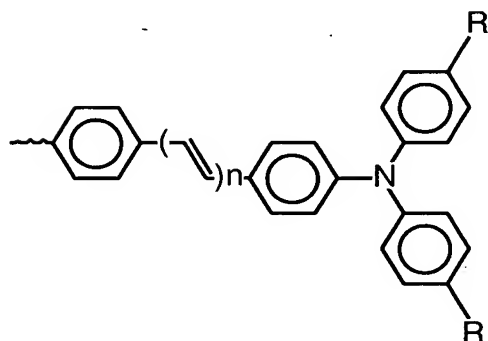
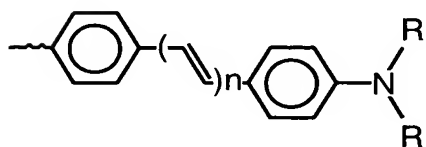


FIG. 4

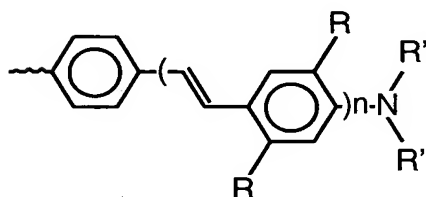
TPA PDTChromophores for Attachment to Dyad or Triad Structures



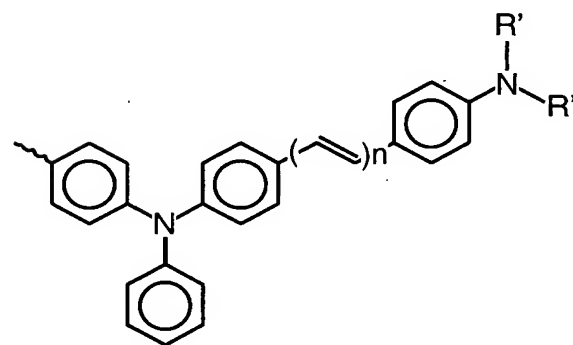
$n = 1-5$
 $R = \text{H, Alkyl, Alkyloxy, } -(OCH_2CH_2)_nOG;$
 $G = \text{H, Alkyl}$



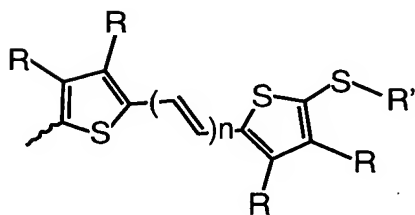
$n = 1-5$
 $R = \text{Alkyl}$



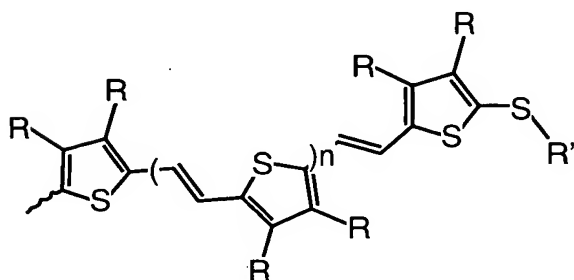
$n = 1-3$
 $R = \text{H, CN, Alkyl, Alkyloxy}$
 $R' = \text{Phenyl, Alkyloxyphenyl, Alkyl, Phenyl}(OCH_2CH_2)_nOG; G = \text{H, Alkyl}$



$n = 1-5$
 $R = \text{Alkyl, Phenyl, Alkyloxyphenyl, Phenyl}(OCH_2CH_2)_nOG; G = \text{H, Alkyl}$



$n = 1-5$
 $R = \text{H, Alkyl, } (OCH_2CH_2)_nOG; G = \text{H, Alkyl}$
 $R' = \text{Alkyl}$



$n = 1, 2, 3$
 $R = \text{H, Alkyl, } (OCH_2CH_2)_nOG; G = \text{H, Alkyl}$
 $R' = \text{Alkyl}$

~ = Point of Attachment to Porphyrin Moiety

FIG. 5